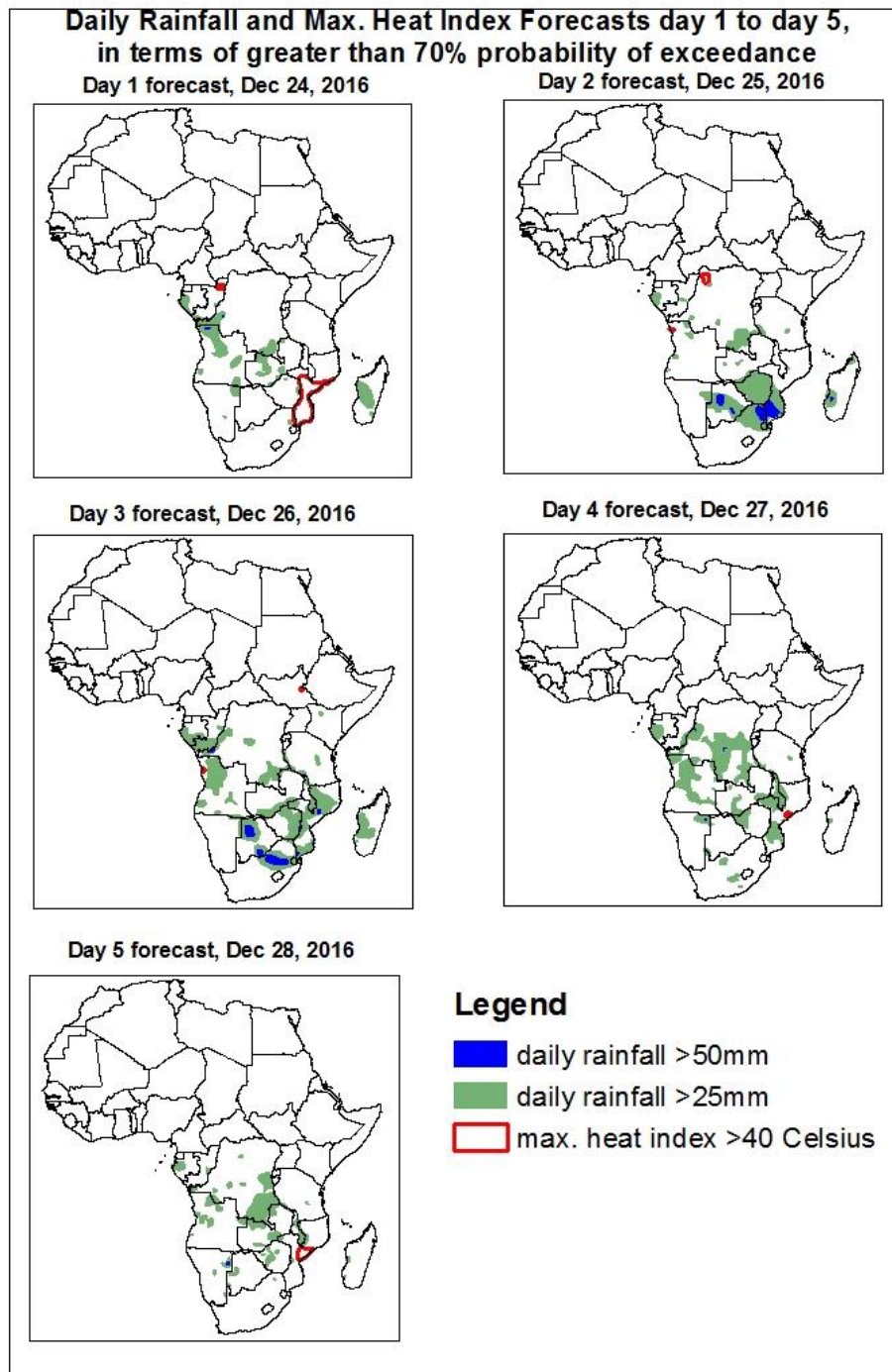


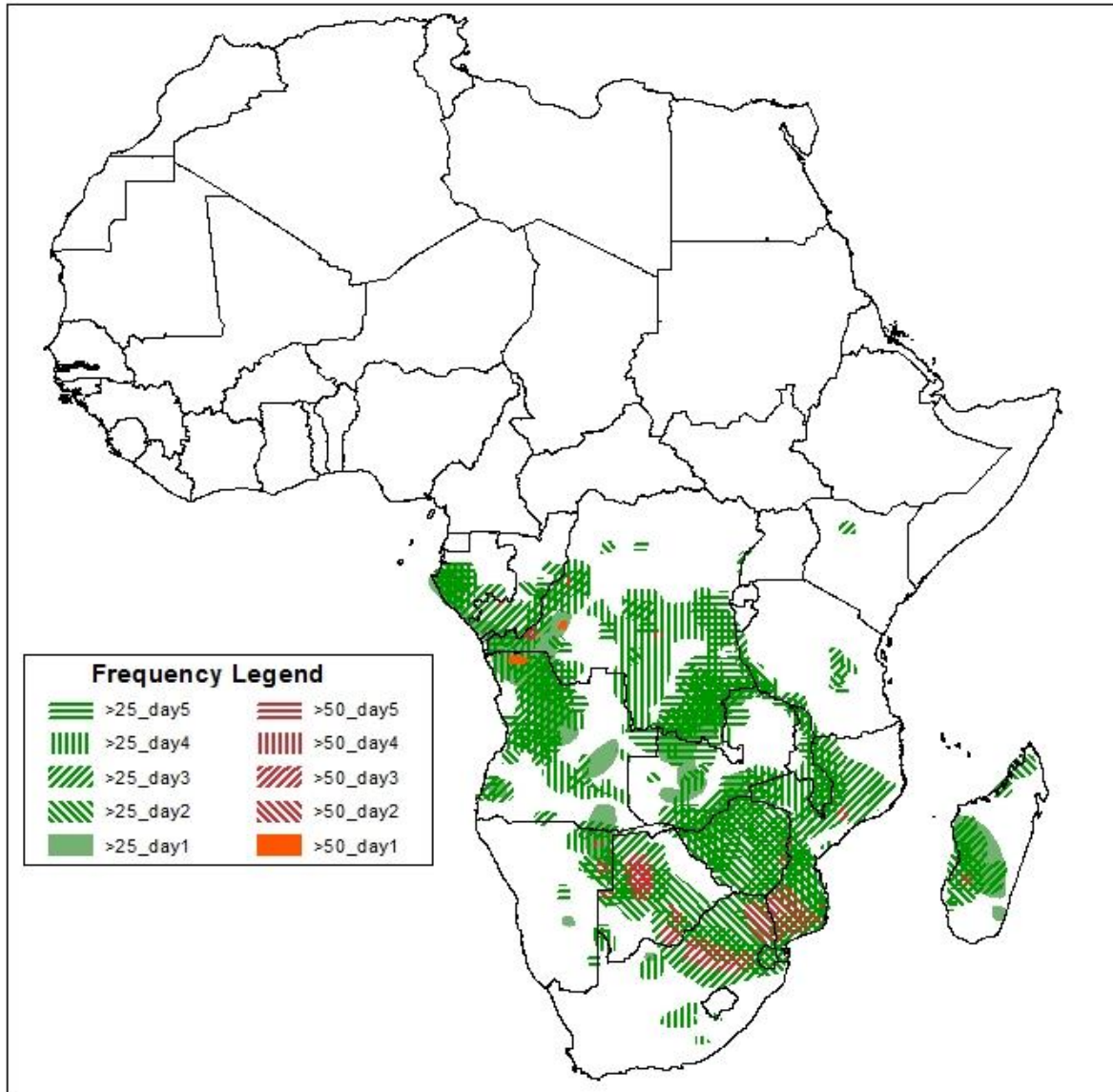
## 1. Rainfall, Heat Index and Dust Concentration Forecasts, (Issued on Dec 23, 2016)

### 1.1. Daily Rainfall and Maximum Heat Index Forecasts (valid: Dec 24 – Dec 28, 2016)

The forecasts are expressed in terms of high probability of precipitation (POP) and high probability of maximum heat index, based on the NCEP/GFS, ECMWF and the NCEP Global Ensemble Forecasts System (GEFS) and expert assessment.



## Five Days Rainfall Forecast Summary Dec 24 - Dec 28, 2016

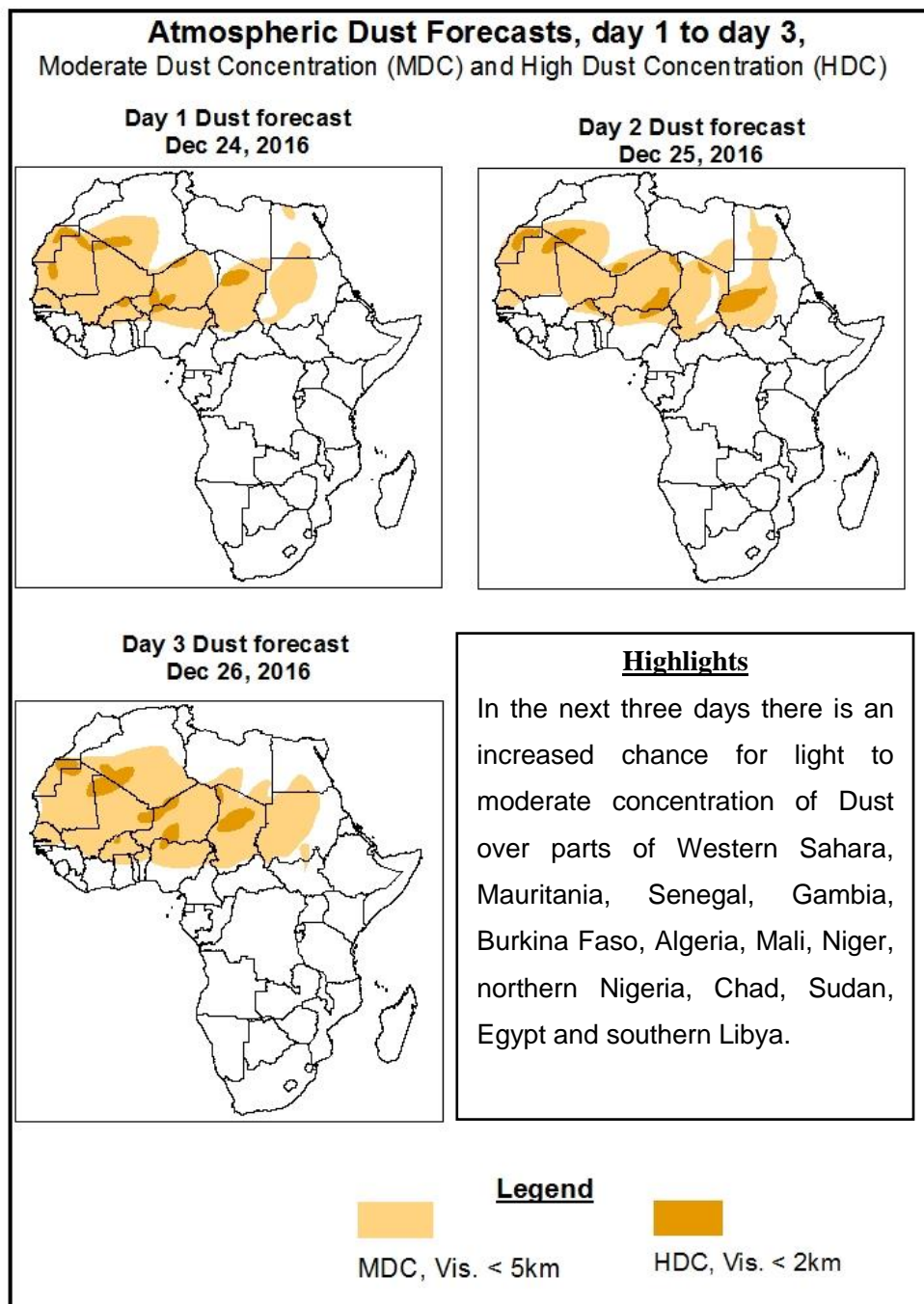


### **Highlights**

In the next five days, lower level wind convergences across the Northern parts of the South African countries are expected to enhance rainfall in their respective regions. Therefore, there is an increased chance for two or more days of light to moderate rainfall over the portions of Gabon, DRC, Angola, Botswana, Zimbabwe, Mozambique, Malawi and Swaziland, local areas of Congo, Zambia, Namibia, South Africa and Madagascar.

## 1.2. Atmospheric Dust Concentration Forecasts (valid: Dec 24 – Dec 26, 2016)

The forecasts are expressed in terms of high probability of dust concentration, based on the Navy Aerosol Analysis and Prediction System, NCEP/GFS lower-level wind forecasts and expert assessment.



### **1.3. Model Discussion, Valid: Dec 24–Dec 28, 2016**

The Azores High Pressure system over the North Atlantic Ocean is expected to weaken, with its value of the central pressure decreasing from 1038hPa to 1035hPa in the next 48 hours, intensify to 1036hPa in the next 72 hours, and later weaken to 1032hPa during the remaining forecast period.

The St. Helena High Pressure system over the Southeast of the Atlantic Ocean is expected to weaken, with its value of the central pressure decreasing from 1024hPa to 1020hPa in the next 48 hours, intensify to 1022hPa in the next 96 hours, and later weaken to 1021hPa during the remaining forecast period.

The Mascarene High Pressure system over the Southwest Indian Ocean is expected to intensify, with its value of the central pressure increasing from 1020hPa to 1026hPa during the forecast period.

At 925hPa, strong dry Northerly to Easterly winds may lead from light to moderate dust concentration over parts of Western Sahara, Mauritania, Senegal, Gambia, northern Ghana, Guinea, Mali, Algeria, Burkina Faso, Niger, northern Benin, northern Nigeria, Chad, Sudan, Egypt and southern Libya.

At 850hPa level, lower level wind convergences are expected to prevail over Congo, Gabon, DRC, Angola, Namibia, Botswana and Ethiopia.

In the next five days, lower level wind convergences across the Northern parts of the South African countries are expected to enhance rainfall in their respective regions. Therefore, there is an increased chance for two or more days of light to moderate rainfall over the portions of Gabon, DRC, Angola, Botswana, Zimbabwe, Mozambique, Malawi and Swaziland, local areas of Congo, Zambia, Namibia, South Africa and Madagascar.

## 2.0. Previous and Current Day Weather over Africa

### 2.1. Weather assessment for the previous day (Dec 22, 2016)

Light to moderate rainfall was observed over portion of Tunisia, Libya, Gabon, Botswana, South Africa and Mozambique.

### 2.2. Weather assessment for the current day (Dec 23, 2016)

Intense convective clouds are observed over portions of Gabon, Congo, DRC, Angola, Zambia, Namibia, Botswana, Zimbabwe, Mozambique, South Africa, Swaziland and Madagascar.

